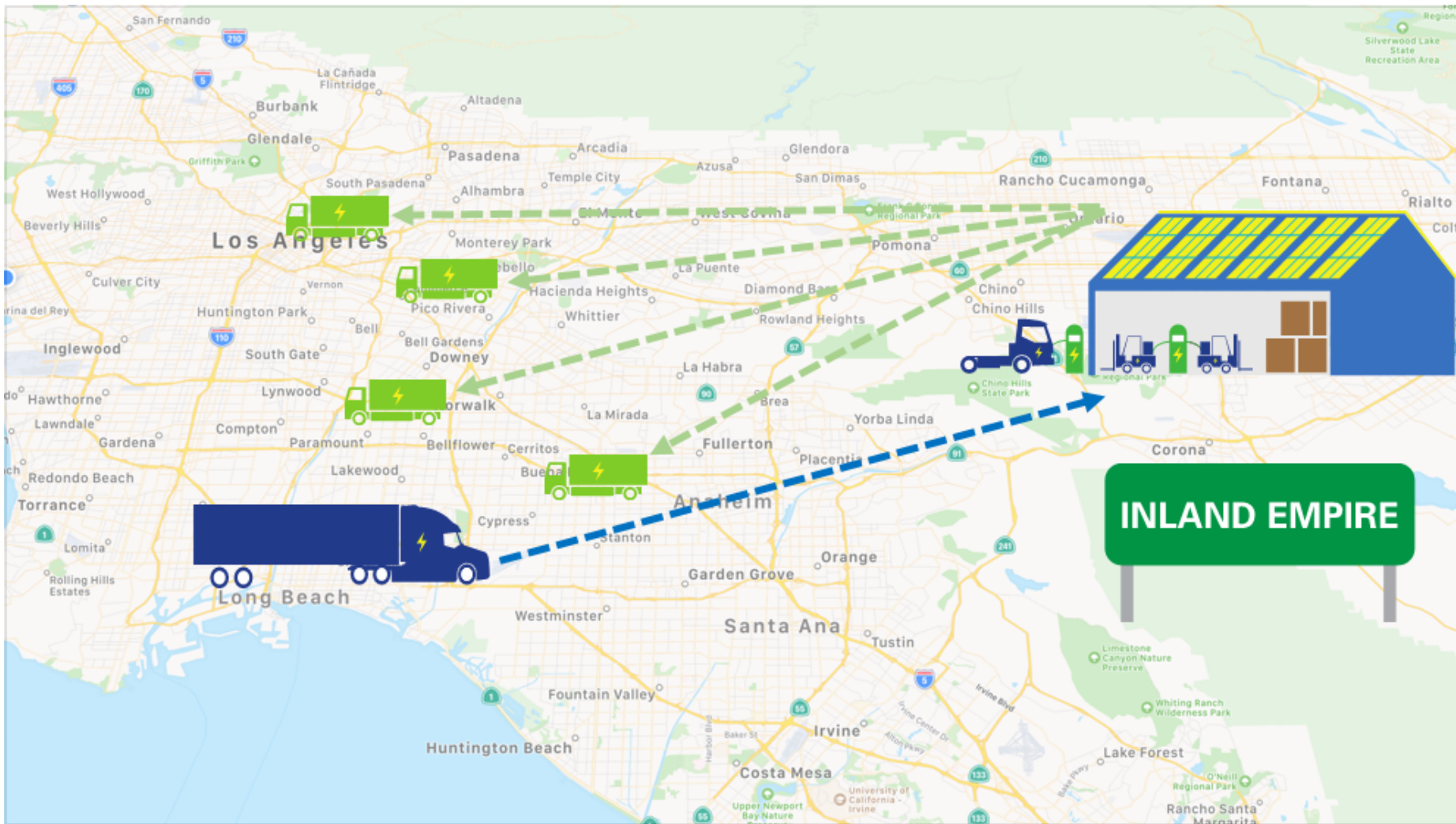




# Volvo LIGHTS Project

## Low Impact Green Heavy Transport Solutions

This project will create a zero emission goods movement system from the Ports of Long Beach and Los Angeles to four freight handling facilities in disadvantaged communities. This project will deploy pre-commercial and commercial zero emission technologies, including the introduction of Volvo’s North American Class 8 battery electric truck. There will also be data collection, maintenance training, and outreach to encourage early adoption of these technologies.



**Dates:** 2/25/2019 – 6/30/2021  
**Grantee:** SCAQMD  
**Partners:** Volvo, DHE, NFI, TEC Equipment, CALSTART, Greenlots, Burns & McDonnell, Trillium, SCE, UCR, UCR CE-CERT, Rio Hondo and San Bernardino Valley College, Reach Out, POLA, POLB  
**Grant Amount:** CARB Contribution: \$44,839,686  
 Matching Funds: \$45,855,308  
 Project Total: \$90,694,994



### Vehicles/Equipment Funded

52 Pre-commercial and commercial class 8 vehicles and infrastructure deployed at freight handling facilities:

- 23 Heavy-duty battery electric trucks (HDBET)
- 29 Off-road battery electric tractors
- 58 Non-proprietary Level 2 and DC fast chargers
- 1.9 million kWh annual solar energy

Featured innovative technologies:

- Multiple truck configurations with up to 100-320 mile electric range
- New lithium ion battery chemistry for increased energy density by >20%
- Self-learning control algorithms that optimize energy usage and range
- Targeted HD electric truck platform in three market segments to showcase highest potential: drayage, distributional short regional haul
- During the project, Volvo Class 8 HDBET will go from pre-commercial to commercial
- Solar and second life batteries to mitigate grid impacts and energy costs
- Networked chargers with vehicle telematics
- Trucks available for leasing by fleets in 2021

### Status Updates

- Project kickoff in March 2019
- Develop plan to demonstrate Class 8 HDBEVs

